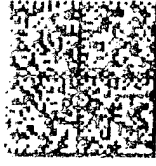


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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,716	04/03/2008	Ruediger Freitag	3836	9966
278	7590	04/28/2009		
MICHAEL J. STRIKER 103 EAST NECK ROAD HUNTINGTON, NY 11743			EXAMINER GANEY, STEVEN J	
			ART UNIT 3752	PAPER NUMBER
			MAIL DATE 04/28/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/589,716	Applicant(s) FREITAG ET AL.	
	Examiner STEVEN J. GANEY	Art Unit 3752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>8/17/06 12/22/08</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities: In line 3, the phrase "the first fire protection barrier" should be changed to --a first fire protection barrier-- to provide proper antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sundholm '309.

Sundholm '309 discloses a fire protection system comprising a fire protection glass pane fire door 14a/14b; fire activated water spray system with outlet nozzles 7 on both sides of the fire protection glass pane, which applies a curtain-like water spray haze in front of the glass pane and which partially wets the glass pane, except for the glass pane being a fire-risk category E. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a glass pane with a fire-risk category E rating since the door is being used as a fire resistant door to provide a fire protection barrier and would depend on the fire resistance rating desired for the barrier.

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As to claim 5, and the distance between the nozzles and the fire protection glass pane, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the nozzles at the claimed distance range from the glass pane since it has been held that if one skilled in the art can discover the optimum or workable ranges by routine experimentation, where the general conditions of a claim are disclosed in the prior art, the differences between the claimed invention and the prior art may not be patentable differences. In *re Aller*, 220 F.2d 454,456 105 USPQ 233,235 (CCPA 1955).

As to claim 8, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide droplets of less than 200 microns, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In *re Boesch*, 617 F.d 272, 205 USPQ 215 (CCPA 1980). In addition, it is well known in the fire protection art that water sprays with smaller droplet sizes have higher heat absorption rates which facilitates cooling.

As to claim 9, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the water spray system designed as a high-pressure water spray system with pressures from 10 to 200, since it has been held that if one skilled in the art can discover the optimum or workable ranges by routine experimentation, where the general conditions of a claim are disclosed in the prior art, the differences between the claimed invention and the prior art may not be patentable differences. In *re Aller*, 220 F.2d 454,456 105 USPQ 233,235 (CCPA 1955).

As to claims 10-14, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide glass panes composed of the materials claimed, since

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it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

As to claim 17, It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a double door with a transom light depending on the size of the opening provided and desired to be protected.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Thompson, Renard, Miller, Van Lingen and Sundholm '160 show various types of water spray systems for protecting barriers and other types of openings.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEVEN J. GANEY whose telephone number is (571)272-4899. The examiner can normally be reached on 9:00-5:00; Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Len Tran can be reached on 571-272-1184. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steven J. Ganey/
Primary Examiner
Art Unit 3752

sjg

Receipt date: 08/17/2006 INFORMATION DISCLOSURE CITATION <i>(Use several sheets if necessary)</i>	ATTY DOCKET NO. 8/589716 APPLICATION NO. 3836 APR 17 2006 REC'D PCT/PTO FREITAG FILING DATE _____ GROUP ART UNIT _____
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U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5 990 023	11/23/1999	SIEDEL ET AL			

U.S. PATENT APPLICATION PUBLICATIONS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	2003/0230413	12/18/2003	USMANOV ET AL			

FOREIGN PATENT DOCUMENTS

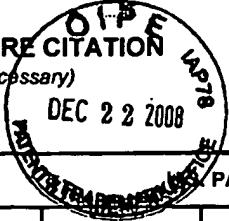
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					YES	NO
32 34 968	03/22/1984	DE (WITH ENG. ABST.)			✓	
203 10 976	11/06/2003	DE				✓
31 06 110	09/02/1982	DE (WITH ENG. ABST.)			✓	
1 255 021	11/06/2002	EP (WITH ENG. ABST.)			✓	
101 45 136	04/10/2003	DE				✓

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER /Steven Ganey/	DATE CONSIDERED 04/26/2009
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Receipt date: 08/17/2006 INFORMATION DISCLOSURE CITATION <i>(Use several sheets if necessary)</i>		ATTY DOCKET NO. 10/209740 APPLICATION NO. 10/209740 10/209740 PCT/PTO 17 AUG 2006 FREITAG FILING DATE _____ GROUP ART UNIT _____						
U.S. PATENT DOCUMENTS								
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
U.S. PATENT APPLICATION PUBLICATIONS								
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
FOREIGN PATENT DOCUMENTS								
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
		196 40 537	06/13/2002	DE (WITH ENG. ABST.)			✓	
		2003111858	04/15/2003	JP (ENG. ABST. ONLY)			✓	
		197 10 289	05/14/1998	DE (WITH ENG. ABST. & EQUIV.)			✓	
		0 658 677	06/21/1995	EP (WITH ENG. ABST.)			✓	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)								
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Receipt date: 12/22/2008 INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)				ATTY DOCKET NO. 3836		APPLICATION NO. 10/589,716		
				APPLICANT(S) FREITAG, R., ET AL		GROUP ART UNIT		
				FILING DATE 08/17/2006				
PATENT DOCUMENTS								
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
		3,605,900	09/20/1971	W.L. LIVINGSTON ET AL				
U.S. PATENT APPLICATION PUBLICATIONS								
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
FOREIGN PATENT DOCUMENTS								
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
		01/69028	09/20/2001	WO (W/English Abstract)			✓	
		1 951 218	06/11/1970	DE (W/English Equivalent)			✓	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)								
		DIN EN 1363-1 " FIRE RESISTANCE TESTS: PART 1 GENERAL REQUIREMENTS." ICS 13.220.50. 49 PAGES. OCTOBER 1999. EUROPEAN COMMITTEE FOR STANDARDIZATION: CEN. SEPTEMBER 1977 EDITION.						
		DIN EN 1363-2 "FIRE RESISTANCE TESTS: PART 2 ALTERNATIVE AND ADDITIONAL PROCEDURES." ICS 13.220.50. 15 PAGES. OCTOBER 1999. EUROPEAN COMMITTEE FOR STANDARDIZATION: CEN. SEPTEMBER 1977 EDITION, AND DIN 4102-11, DECEMBER 1985 EDITION.						
EXAMINER /Steven Ganey/				DATE CONSIDERED 04/26/2009				
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Docket Number (Optional) 3836	Application Number 10/589,716								
Applicant(s) FREITAG, R., ET AL									
Filing Date 08/17/2006	Group Art Unit								
*EXAMINER INITIAL	OTHER DOCUMENTS <i>(Including Author, Title, Date, Pertinent Pages, Etc.)</i>								
	SUB-COMMITTE ON FIRE PROTECTION 47-TH SESSION, AGENDA ITEM 1, DECEMBER 18, 2002 (IN ENG.)								
	SUB-COMMITTE ON FIRE PROTECTION 47-TH SESSION, AGENDA ITEM 8, OCTOBER 8, 2002 (IN ENG.)								
	SUB-COMMITTE ON FIRE PROTECTION 47-TH SESSION, AGENDA ITEM 8, NOVEMBER 14, 2002 (IN ENG.)								
	SUB-COMMITTE ON FIRE PROTECTION 47-TH SESSION, AGENDA ITEM 8, DECEMBER 3, 2002 (IN ENG.)								
	SUB-COMMITTE ON FIRE PROTECTION 47-TH SESSION, AGENDA ITEM 8, NOVEMBER 4, 2002 (IN ENG.)								
	SUB-COMMITTE ON FIRE PROTECTION 47-TH SESSION, AGENDA ITEM 14, NOVEMBER 26, 2002 (IN ENG.)								
	SUB-COMMITTE ON FIRE PROTECTION 47-TH SESSION, AGENDA ITEM 8, FEBRUARY 13, 2003 (IN ENG.)								
	SUB-COMMITTE ON FIRE PROTECTION 47-TH SESSION, AGENDA ITEM 16, FEBRUARY 14, 2003 (IN ENG.)								
	SUB-COMMITTE ON FIRE PROTECTION 48-TH SESSION, JANUARY 12-16, 2004 (IN ENG.)								
	SUB-COMMITTE ON FIRE PROTECTION 48-TH SESSION, AGENDA ITEM 1, JUNE 30, 2003 (IN ENG.)								
	SUB-COMMITTE ON FIRE PROTECTION 48-TH SESSION, AGENDA ITEM 5, OCTOBER 10, 2003 (IN ENG.)								
	SUB-COMMITTE ON FIRE PROTECTION 48-TH SESSION, AGENDA ITEM 5, JANUARY 14, 2004 (IN ENG.)								
EXAMINER /Steven Ganey/		DATE CONSIDERED 04/26/2009							
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INFORMATION DISCLOSURE CITATION

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Docket Number (Optional)

3836

Application Number

10/589,716

Applicant(s)

FREITAG, R., ET AL

Filing Date

08/17/2006

Group Art Unit

*EXAMINER INITIAL	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
	DIN EN 1634-3, JANUARY 2005, "FIRE RESISTANCE TESTS FOR DOOR AND SHUTTER ASSEMBLIES: PART 3 SMOKE CONTROL DOORS AND SHUTTERS". 20 PAGES. EUROPEAN COMMITTEE FOR STANDARDIZATION: CEN. ICS 13.220.50; 91.060.50. JANUARY 2005.
	DIN EN 1364-1, "FIRE RESISTANCE TESTS FOR NON-LOADBEARING ELEMENTS: PART 1: WALLS" ICS 13.220.50. EUROPEAN COMMITTEE FOR STANDARDIZATION: CEN. OCTOBER 1999. 31 PAGES.
	DIN EN 1364-2, "FIRE RESISTANCE TESTS FOR NON-LOADBEARING ELEMENTS: PART 2: CEILINGS." 18 PAGES. ICS 13.22.50, OCTOBER 1999. 18 PAGES. EUROPEAN COMMITTEE FOR STANDARDIZATION: CEN.
	DIN EN 1634-1 " FIRE RESISTANCE TESTS FOR DOOR AND SHUTTER ASSEMBLIES: PART 1: FIRE DOORS AND SHUTTERS." 66 PAGES. ICS 13.22.50. EUROPEAN COMMITTEE STANDARDIZATION-CEN. MARCH 2000.
	DIN EN 1634-2:2004-04. ENGLISH ABSTRACT. " FIRE RESISTANCE AND SMOKE CONTROL TESTS FOR DOOR AND SHUTTER ASSEMBLIES, OPENABLE WINDOWS AND ELEMENTS OF BUILDING HARDWARE: PART 2: FIRE RESISTANCE CHARACTERIZATION TEST FOR ELEMENTS OF BUILDING HARDWARE; GERMAN VERSION PREN 1634-2:2006. OCTOBER 2006. 65 PAGES.
	DIN EN 1364-3 BERICHTIGUNG 1. " FIRE RESISTANCE TESTS FOR NON-LOADBEARING ELEMENTS: PART 3: CURTAIN WALLING." MARCH 2007. ICS 13.220.50. 30 PAGES. EUROPEAN COMMITTEE FOR STANDARDIZATION. DECEMBER 2006.
	DIN EN 1364-4. "FIRE-RESISTANCE TESTS FOR NON-LOADBEARING ELEMENTS PART 4: CURTAIN WALLING." JUNE 2007. ICS 13.220.50; 91.060.10. MARCH 2007. EUROPEAN COMMITTEE FOR STANDARDIZATION. 44 PAGES.
EXAMINER	DATE CONSIDERED
/Steven Ganey/	04/26/2009

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Notice of References Cited	Application/Control No. 10/589,716	Applicant(s)/Patent Under Reexamination FREITAG ET AL.	
	Examiner STEVEN J. GANEY	Art Unit 3752	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-1,620,142	03-1927	THOMPSON ALBERT F	169/16
*	B	US-1,936,732	11-1933	RENARD HENRY L	239/208
*	C	US-3,754,600	08-1973	Miller, Norman C.	169/48
*	D	US-6,167,971	01-2001	Van Lingen, Paul	169/16
*	E	US-6,779,309	08-2004	Sundolm, Goran	49/1
*	F	US-6,884,160	04-2005	Sundholm, Gooran	169/48
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
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	M	US-			

FOREIGN PATENT DOCUMENTS

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	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
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